

## R E M A R K S

Claims 1, 2, 4, 7-10 are pending. Claims 3, 5 and 6 have been cancelled.

Claims 1 and 4 have been amended to be in the product-by-process format. Support for the process limitation can be found in page 4, lines 15-18.

New claims 9 and 10 find support in the specification.

No new matter has been added by way of the above-amendment.

Issues under 35 U.S.C. 112, second paragraph

Claims 1, 2, 4, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph for being indefinite. Applicants respectfully traverse the rejection.

In response to the Examiner's suggestion, Applicants have not amended the claims by replacing the phrase "sheet material" with "ring-like core". It is respectfully submitted that the Examiner's suggested amendment does not have written description support. It is clear from the description on page 4 relating to Figures 1 and 2 that the term "ring-like core" refers to element "3" in Figure 2. This element "3" is taught to be removable once the tape "1" has been wound around element "2", see page 4, lines 35-36. It is clear that it would be very difficult to

remove the ring-like core "3" if the adhesive side of the tape "1" is in direct contact with the ring-like core "3".

Since the adhesive tape "1" is shown to be in direct contact with element "2", Applicants have not amended the claims as suggested by the Examiner.

Furthermore, it is clear from the disclosure of the specification at page 4, beginning at line 1, that the "sheet-like material" and the "ring-like body" element "2" differ only with respect to the type of material used. The "sheet-like material" can be made of a paper sheet, plastic film or a metal foil, see page 4, lines 3-4, whereas the "ring-like body" is made of a printed paper, see page 3, lines 30-31.

Accordingly, Applicants respectfully submit that the claims, as presently amended, particularly point out and distinctly claim the subject matter Applicants regard as the invention. As such, withdrawal of the rejection is respectfully requested.

Issues Under 35 U.S.C. §103

Claims 1, 2, 4, 7 and 8 remain rejected under 35 U.S.C. §103(a) as being unpatentable over JP 51-148383 (JP '383). Applicants respectfully traverse the rejection.

As further evidence of the patentability of the present invention, Applicants enclose herewith a Declaration under 37 CFR 1.132 from one of the coinventors, Mr. Daisuke Suitsu. In support of the arguments made in the Declaration, Applicants have amended claim 1 to recite that the wound adhesive tape is prepared in a process comprising a step of winding the tape around the substantially flat sheet material.

The significance of the contents of the Declaration will now be discussed.

Crease Would Naturally Form On Prior Art Wound Tape

As noted in JP '383, the core, which is made of a plastic material, is formed in a flat shape by heating and pressing a plastic pipe that was formed in a cylindrical shape. The core made of paper is formed in a flat shape by winding sheet-like paper around the outer peripheral surface of the core material and the wound adhesive tape is formed into a flat shape by pressing the entire composite after the adhesive tape is wound around the outer peripheral surface of the cylindrical ring-like core (see lines 13-

16 of page 3 of the English translation enclosed with the June 12, 2003 Amendment).

As evidenced by the enclosed Rule 132 Declaration, adhesive tape wound in such a manner frequently forms a crease in the center of the flat-shape wound adhesive tape. In the case of a wound adhesive tape, tension is linked to the adhesive tape when a cylinder shaped adhesive tape is transformed into a flat state, because the adhesive face and the back face are fixed together and the adhesive tape is not able to move freely. The adhesive tape is pulled at the "a" position described in Fig. 1 below.

At the "b" position of Fig. 1, the adhesive tape is at the outside circumference side and becomes longer than the inside circumference side. As a result, a crease occurs at the "b" position because the adhesive tape is not able to move freely.

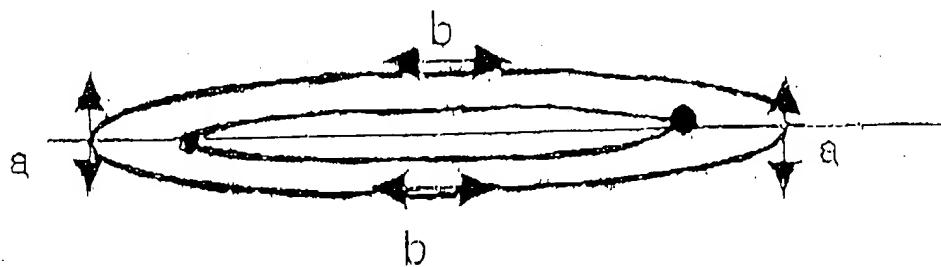


Fig. 1 A flat shaped wound adhesive tape produced by pressing around a cylinder core into a flat shape.

Accordingly, it is clear that the undesirable crease will result in the wound tape from pressing the circular ring body of JP '383 into a flat structure, and as such, the inventive wound tape is structurally distinct from the tape of JP '383. Since the inventive wound tape is structurally distinct from the tape of JP '383 as a result of the process in which it has been made, it is appropriate for the Examiner to give patentable weight to the process limitation of product-by-process claims 1 and 4.

Thickness of the Sheet-like Material

In inventive claims 1 and 4, the thickness of the sheet-like material is limited to 10-70 microns.

The Examiner notes that JP '383 teaches a thickness range of the ring body of 0.1-5mm.

The Examiner makes the following assertions: a) the range of JP '383 is only a preferred range; b) the thickness "chosen is simply a function of what are the desired end properties of the wound adhesive tape;" and c) this parameter is well within the skill of the artisan.

Applicants respectfully request that the Examiner reconsiders his position. The advantage of the inventive flexible sheet-like material is that the tape can be rewound. Since the thickness of the ring body of JP '383 clearly falls outside of the thickness

range of the sheet-like material of inventive claims 1 and 4, the core of JP '383 would not be sufficiently flexible and readily deformable to allow fingers of the hand to be readily inserted inside the ring-like core to facilitate the rewinding of the adhesive tape thereon.

The Examiner asserts that the thickness is a function of the desired end properties of the user. Clearly, there is no teaching or suggestion by JP '383 that the adhesive tape may be rewound on the sheet-like material. Accordingly, if the Examiner's assertion is correct that the thickness is a function of the desired end properties of the user, then the skilled artisan would not be motivated to reduce the thickness of the body to be within the inventive range.

Applicants submit that the mere fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness. The prior art must contain a suggestion to make the modification, and there is clearly no suggestion by JP '383 to modify the thickness of the ring body of JP '383 to be within the inventive range of 10-70 microns of the sheet-like material. The mere fact that a prior art device could have been modified, does not make the modification obvious unless the prior art suggested the desirability of the modification. See e.g., In re Gordon, 221

USPQ 1125, 1127 (Fed. Cir. 1984) and Ex parte Tanksley, 37 USPQ2d 1382 (BPAI 1994).

Accordingly, the inventive thickness range of 10-70 microns for the sheet-like material is a patentable distinction.

Printed Matter On The Inner Surface Of The Ring

The present invention is concerned with the use of printed matter on a substantially flat sheet-like material which is flexible and readily deformable. Normally, such printed matter could not be provided on such a substantially flat sheet-like material, because it would not be possible to see the printed matter unless the flat sheet-like material is sufficiently flexible and deformable so that it could be sufficiently deformed to read the printed matter. Thus, the teachings of JP '383 does not make the present invention obvious, since the material of JP '383 could not be sufficiently deformed so as to read any printed matter provided thereon. As such, the conclusions reached by the Examiner can only be made in view of the Applicants' own disclosure.

Additional Comments

JP '383 relates to a wound adhesive tape comprising a ring-like core formed in a nearly flat shape, and an adhesive tape

wound around the circumference face of the ring-like core with an adhesive on the inner surface of the tape. The core is made of a plastic plate or a cardboard paper having a thickness of 0.1mm to 5 mm.

This core of JP '383 needs to have some degree of strength because the adhesive tape is wound around its outer peripheral surface with the adhesive surface usually extending more than 5m in length. Accordingly, the core of JP '383 needs to be manufactured with a stiff material having a thickness of 1 mm or more.

If an adhesive tape having a length of 5m or more were wound to the core having a thickness of 0.5mm produced by using the above mentioned material, the core would likely break or permanently bend because of the force of the winding tension when the adhesive tape is wound around its outer peripheral surface.

On the other hand, in a wound adhesive tape in accordance with one embodiment of the present invention, a ring-like core "3" made of a stiff plastic plate having a thickness of 2mm takes charge of winding tension when an adhesive tape is wound, and after the adhesive tape was wound, the above-mentioned ring-like core "3" made of a stiff plastic plate is removed.

Therefore, in the wound adhesive tape in accordance with the present invention, a ring-like body "2" or a sheet-like material having a thickness of 10 $\mu$ m to 70 $\mu$ m does not break and also does not malform, even though an adhesive tape having a length of at least 5m is wound around the outer peripheral surface of the ring-like body "2" or a sheet like material having a thickness of 10 $\mu$ m to 70 $\mu$ m with an adhesive surface facing inside.

Based on the foregoing, Applicants respectfully submit that a *prima facie* case of obviousness cannot be said to exist, and as such, withdrawal of the rejections are respectfully requested.

CONCLUSION

In view of the above amendments and comments, Applicants respectfully submit that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

If the Examiner has any questions concerning this application, he is requested to contact Garth M. Dahlen, Ph.D., Esq. (#43,575) at the offices of Birch, Stewart, Kolasch & Birch, LLP.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a one (1) month extension of time for

filing a reply in connection with the present application, and the required fee of \$55.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
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Attachment: Executed Declaration under 37 CFR 1.132  
of Mr. Daisuke Suitsu

MSW/GMD/bmp  
0044-0243P